# Paper for Consideration by MACHC IHO Secretariat Report

Submitted by: Secretariat of the IHO

**Executive Summary:** This paper reports on the activities of the IHO that may impact the work of the

**MACHC** 

#### Entry into force of the Amendments to the IHO Convention and its supporting Basic Documents

- 1. The Amendments to the IHO Convention and its supporting Basic Documents entered into force on 8 November 2016. The most significant changes to the organization of the IHO are:
  - the term International Hydrographic Bureau (IHB) used to describe the headquarters and the secretariat of the IHO is replaced by the term IHO Secretariat;
  - the Directing Committee, comprising a President and two Directors ceases to lead the IHB (Secretariat of the IHO). Instead, the Secretariat of the IHO is now led by a Secretary-General assisted by two subordinate Directors;
  - the term International Hydrographic Conference used to designate the principal organ of the Organization, composed of all Member States, is replaced by the term Assembly. The ordinary sessions of the Assembly will be held every three years instead of every five years for the Conference. The first session of the IHO Assembly (A-1) will be held in Monaco from 24 to 28 April 2017, at which time an IHO Council will be established. In order to provide a logical and sequential timetable for decision making, the Secretary-General anticipates that the first meeting of the Council (C-1) will take place in October 2017 and annually thereafter. The second session of the Assembly (A-2) should take place in April 2020;
  - the subsidiary organs, including the Committees, of the IHO will report to the Council that will then refer endorsed proposals for adoption either to the Assembly or to the Member States through correspondence;
  - the planning cycle for the IHO work programme and budget changes from a five-year to a three-year cycle. The next cycle will run from 2018 to 2020.
  - for States wishing to join the IHO that are already Member States of the United Nations there is no requirement to seek the approval of existing Member States of the IHO;
  - the strict eligibility requirements for candidates seeking election as the Secretary-General or a Director are relaxed; and
  - in future, where voting by correspondence is required, through the Council, decisions will be taken based on a majority of the Member States that cast a vote, rather than the existing arrangements where a majority of all the Member States entitled to vote is required. A minimum number of at least one-third of all Member States eligible to vote must vote positively for the vote to stand

### Status of Membership of the IHO

- 2. One of the main changes resulting from the entry into force of the revised IHO Convention is that, for States wishing to join the IHO that are already Member States of the United Nations, there is no requirement to seek the approval of existing Member States of the IHO. Accordingly, the following States: Bulgaria, Congo, **Haiti**, Malta, Mauritania, Sierra Leone, Solomon Islands, and Vanuatu, that have already applied for membership of the IHO, may now submit their instruments of accession to the Convention on the IHO and thereby become members immediately.
- 3. The following Associate Members of the MACHC have yet to apply to become members of the IHO: Antigua and Barbuda, Barbados, Belize, Costa Rica, El Salvador, Guyana, Haiti, Honduras, Nicaragua, Panama, Saint Lucia, St Kitts and Nevis, and St. Vincent and the Grenadines. All are Member States of the UN. The members and associate members of the MACHC are encouraged to engage with the other coastal States in the region to raise awareness of the value and importance of hydrography and to encourage them to become members of the MACHC and the IHO (Bahamas,

Dominica and Grenada). Dominican Republic is a suspended Member State of the IHO and is working to be reintegrated to the Organization.

### INT Chart and ENC Production Coordination - Region B

- 4. The current web-based version of S-11 Part B for Region B is edition 3.0.0 dated January 2016. This new edition reports that 47 INT charts are available to date, out of 82 charts in the scheme. It is expected that a new edition will be released, in liaison with the regional INT Chart Coordinator, after the MACHC-17.
- 5. The Region B Coordinator participated in the 6<sup>th</sup> meeting (March 2016) of the WENDWG where the WENDWG invited:
  - Regional Hydrographic Commissions to define and adopt ENC Schemes (as it is done for INT Charts Schemes) and to provide basic metadata to the IHB, and
  - the IHB to consider including a layer of "Approved" ENC Schemes in the IHO ENC Catalogue or as an extension of the INT Web Chart Catalogue.
- 6. A few ENC overlap issues in Region B were reported to the WENDWG.
- 7. IHO CL 61/2015 dated 24 August 2015 informed Member States of the promulgation of Circular MSC.1/Circ.1503 of 24 July 2015 on *ECDIS Guidance for Good Practice* by the Secretariat of the International Maritime Organization (IMO). Noting that the Circular refers to the IHO online ENC Catalogue and that the mention includes a reference to the provision of coastal State information on any requirements for ECDIS backup arrangements using paper charts, the Directing Committee reiterated its earlier request (see IHO CL 41/2014) that Member States ensure that the relevant information which has been posted on the IHO website since 2008 (see IHO CL 10/2008) is kept current and to provide the Secretariat with updates as appropriate. Member States were invited to consider the provision of pending updates before the end of 2015 and the provision of subsequent updates, or confirmation of no change, at least once a year. Where relevant information has been provided by Member States, it is located at: *Home > ENCs & ECDIS > ENC Availability > Backup Paper Charts*, and *-Home > ENCs & ECDIS > ENC Availability > Online Chart Catalogues*. The latest information received from MACHC member States is shown in Annex A.
- 8. Requested Action: MACHC representatives to review the entries in Annex A related to their countries and to provide additional information or updates to the IHO Secretariat, as applicable.

#### Regional Hydrographic Capability

- 9. The IHO President (now Secretary-General) provided a country-by-country status report on hydrographic capability to the 17<sup>th</sup> session of the Asia Pacific Heads of Maritime Safety Authorities (APHoMSA) in February. The President expects to be invited to the next meeting of the Caribbean MoU in February 2017. He intends to make a similar country-by-country report at that meeting, stressing the obligation placed upon Maritime Administrations through SOLAS V/9 for providing an appropriate national hydrographic service and the fact that this is an auditable obligation under the IMO Audit Scheme. A draft of the country-by-country report table is included at Annex B.
- 10. Requested Action: MACHC representatives to review the entries in Annex B related to their countries and provide feedback to the IHO Secretariat, where necessary.

#### **Maritime Safety Information Services**

- 11. **MSI Capability and Supportability**. The IHO Capacity Building strategy lays particular emphasis on the fundamental capability for all coastal States to provide a maritime safety information (MSI) service in support of their international obligations. An area of concern is the apparent inability for some countries to support the recipients of IHO MSI training. Based on reports to the IHO World-Wide Navigational Warning Service Sub Committee (WWNWS-SC), the table in Annex C indicates the MSI training received in the MACHC region and the resultant assessed level of capability measured by the number of relevant MSI reports received by the relevant regional MSI coordinator.
- 12. MSI is received regularly from 11 (23%) of the 43 national coordinators. Twenty-two (46%) of the 43, national coordinators successfully completed the IHO MSI Capacity Building course. Seven of the 22 (31%) of the countries that received training provide MSI regularly. It remains a significant challenge to maintain any regular communication with a

number of island states, despite them benefiting from MSI training and a subsequent exchange of contact details with the NAVAREA IV Coordinator.

- 13. NAVAREA IV Coordinator particularly highlights Colombia, Curação, French Guiana, Guatemala, Honduras, Jamaica, Martinique, Mexico, Panama, St. Vincent and the Grenadines, and Trinidad and Tobago for their excellent MSI support.
- 14. It is considered that MSI training should be a priority for the following States:

Haiti

Cuba

Dominican Republic

Ecuador

El Salvador

Venezuela

Nicaragua

Suriname

15. Requested Action: MACHC Representatives are requested to review the status presented at Annex C and to report to the Chair of MACHC any obstacles and challenges that are impeding the establishment of an effective MSI capacity.

#### **Capacity Building Programme**

- 16. The level of activity of the IHO Capacity Building (CB) Programme continued to increase. Expenditure in the IHO 2015 CB Work Programme (930,907 Euros) was 118% greater than the budget for the previous year. This was a result of the ongoing financial support provided by the Nippon Foundation of Japan and the Republic of Korea, supplemented by a contribution from the IHO budget and in-kind support from Member States and from industry. The Directing Committee is continuing its campaign to find additional donor States and funding organizations. In 2015, 86% of the budgeted work program was executed and paid for.
- 17. The MACHC benefited from seven activities under the IHO CB Work Programme (CBWP) since the last meeting:
  - Haiti follow up visit (former 2015 CBWP A-05), led by USA (postponed to Hurricane Matthew)
  - Seminar on Raising Awareness of Hydrography, led by UKHO, Belém, Brazil, 12 December 2016
  - MSI Training, led by UKHO, Rodney Bay, St Lucia, 16-18 August 2016
  - MSDI Workshop for Spanish speakers, led by SEMAR, Veracruz, Mexico, 3-7 October 2016
  - Satellite Derived Bathymetry Workshop, led by UKHO, Belém, Brazil, 13 December 2016
  - Mr. Lizardo CARO MARTINEZ from Colombia and Ms. Ismari Teresa CONSUEGRA ALVAREZ from Cuba
    are attending the 2016 edition of the UKHO Category "B" programme (IHO Nippon Foundation CHART
    Project), and the graduation ceremony is expected during the MACHC17.
- 18. The following activities that will benefit the MACHC are included in the 2017 CBWP, further details to be decided during the MACHC17:
  - Technical implementation visits to Dominican Republic and El Salvador
  - MSI Course
  - Seminar on Raising Awareness of Hydrography
- 19. **Master of Science Programme in Hydrographic Surveying at the University of Southern Mississippi (USA)**. A call for applications was issued in CL 51/2016 for the 2017-2018 session of the Master of Science Programme in Hydrographic Surveying at the University of Southern Mississippi (USA) sponsored by the Republic of Korea. Hydrographic Offices are invited to invest in the preparation of candidates especially with respect to proficiency in English.

#### **IHO GIS and Databases**

- 20. Work has continued on the development of the IHO GIS which is composed of two main parts:
  - a country information database, and
  - a regional information database.
- 21. **IHO Year Book**. The country information database has been progressively upgraded to include additional administrative information and facilitate the maintenance of the IHO Yearbook (IHO Publication P-5) and related lists posted on the IHO website. The status of the date of update of data in the IHO Country Information Database concerning the MACHC Countries is shown in Annex D. Countries in the MACHC Region are invited to review Annex D in relation to their entry in the Yearbook and to provide the IHO Secretariat with any updates or report no change.
- 22. An Esri-based GIS solution is being implemented to develop further the regional information database. This will enable access to various layers of information through the IHO website and through cloud-based on-line GIS options. The IHO ENC Catalogue and the IHO GIS for Antarctica have been transferred to this new environment.
- 23. **C-55**. Work has continued on developing a GIS database application to support C-55 *Status of Hydrographic Surveying and Charting Worldwide* and the work of the IHO. In response to the request to complement C-55 composite data (percentage of areas adequately surveyed / requiring re-survey / not surveyed) with CATZOC information (see IHO CL 52/2015), CATZOC data was provided by PRIMAR on behalf of IC-ENC, PRIMAR and Canada, Singapore, Sweden and Thailand. Useful options for visualising the data in the IHB C-55 GIS are being investigated.
- 24. The latest information date in C-55 from MACHC Countries is shown in Annex D:
- 25. Requested Action: Countries in the MACHC Region are invited to review Annex D and their entry in C-55 and to provide the IHO Secretariat with the appropriate updates or to report no change.
- 26. Following the development of the regional database for Antarctica, the IHB, with support provided by the Republic of Korea, initiated an "INToGIS" project in order to move S-11 part B into an interactive GIS/S-100 compliant environment. The objective of the project is to provide the Regional International Charting Coordination WGs with relevant on-line updated information and the necessary tools to review and maintain INT chart schemes and monitor the implementation of the INT chart schemes. Extending the capability to include ENC scheming and coverage is also envisaged. As announced in IHO CL 89/2015, the new INT Chart Web Catalogue and the associated INT Chart on-line Web Manager services were made available in January 2016 through the IHO website at: www.iho.int > Standards & Publications > S-11 > Part B (link). The following MACHC countries have not yet requested an ID and password for the maintenance of the S-11 database: Cuba, Guatemala, Jamaica, Mexico, Suriname, Trinidad and Tobago, and Venezuela. Those countries are invited to do so as indicated in IHO CL 89/2015, as the IHO Secretariat discontinued the maintenance of the pdf version of the S-11 Part B -Catalogue of INT Charts on 1 April 2016.
- 27. Feedback and lessons learned from the initial use of the INToGIS services and from the implementation of the experimental procedure for the review and monitoring of INT charts decided at IRCC-7 (IHO CL 64/2015 refers) were addressed during the workshop for Regional INT Chart / ENC Coordinators that was held at the IHB on 25 April 2016, just before the second meeting of the Nautical Cartography Working Group. The INT Chart / ENC Coordinators of 14 out of 15 charting regions were present or represented. Region B was represented by a delegate of the Chair of the MICC. A comprehensive demonstration of the INToGIS web-based INT chart scheme management tool was provided. The workshop confirmed the need to maintain the INT chart concept for the foreseeable future, at least for small scale charts. As a IHO CL 64/2015 follow-up, the Chart Coordinator for Region B is reminded to provide his feedback to the IHO Secretariat on the "basic quality assurance check-list for reviewing INT charts" by the end of March 2017 (email ADCS dated 8 Aug 2016 refers).

#### **Crowd-Sourced Bathymetry**

- 28. In accordance with Decision 8 of the EIHC-5, IRCC7 established the Crowd-Sourced Bathymetry Working Group (CSBWG) to provide guidelines on the collection and use of crowd-sourced bathymetry. Member States and other interested parties were invited to nominate representatives to participate in the CSBWG (see IHO CL 42/2015).
- 29. The web-based interface portal to the IHO Data Centre for Digital Bathymetry, hosted by the USA in Boulder, Colorado, as part of its commitment to the system of World Data Centres, is being upgraded to be compatible with the crowd-sourced bathymetry concept. This will enable an IHO-led CSB infrastructure to be established and promoted in

the IMO and across the wider maritime community. It is intended to include a comprehensive presentation on the work and aspirations of the CSBWG at Assembly-1.

#### Preparation of the first session of the IHO Assembly

- 30. The first session of the IHO Assembly is scheduled to take place from 24 to 28 April 2017.
- 31. As indicated in IHO CCL 1 dated 21 April 2016, registration for the Assembly has been available on-line via the IHO website from 1 September 2016. Because of IT security issues, the initial version of the tool is, in the first instance, self-contained, with no connection to the IHO Country Information System (CIS). The initial registration of the identity of applicants will be validated by the IHO Secretariat. After this initial approval, legitimate applicants are able to register for further IHO meetings without having to re-enter their details. The tool has been tested as part of registering participants for HSSC8.
- 32. In accordance with the new General Regulations of the IHO that entered into force on 8 November, the first Assembly will establish an IHO Council. The selection process for the establishment of the Council was initiated by the Secretary-General in October 2016. All RHCs must agree on their process by which they will assign Members to occupy the seat(s) in the Council allocated to them, and possibly instruct, the relevant occupant(s).
- 33. The agenda of the Assembly will include a review of the IHO Strategic Plan and consideration of the IHO Work Programme for the next 3-year cycle. In accordance with IHO Resolution 12/2002 as amended the relevant documents will be prepared by the IHO Secretariat in consultation with the HSSC, the IRCC and the Member States.

#### **IHO Outreach**

### World Hydrography Day

- 34. The theme for World Hydrography Day 2016 was "Hydrography the key to well-managed seas and waterways."
- 35. This theme is intended to highlight the fundamental importance of hydrography and our knowledge of the shape, nature and depth of the seafloor as a fundamental enabler of the proper, safe, sustainable and cost effective use of the world's seas, oceans and waterways.
- 36. Taking into account the discussions at the GEBCO Forum for Future Ocean Floor Mapping held in Monaco in June (see IHO CL 34/2016) and the fact that the depth has not been directly measured in about 50% of the World's coastal waters and about 90% of the oceans, the proposed theme for 2017 is:

"Mapping our sea, oceans and waterways - more important than ever."

#### **Action Requested of MACHC Member States**

Note this report

**Encourage** all non-Member coastal States in the region to join the MACHC and the IHO (paragraph 3)

**Review** the status presented at Annex C and report obstacles and challenges for the establishment of an effective MSI capacity (paragraphs 11 and 12)

**Review** entries related to IHO C-55, P-5 (Yearbook) and ECDIS back up arrangements and report any changes or update to the IHO Secretariat (paragraphs 18 to 22)

**Provide** continuous updates to S-11 Part B for INT Region B through the INToGIS tool and implement the procedure depicted in IHO CL 64/2015 for the review and monitoring of INT charts (paragraphs 4 to 8)

**Report** to the IHO Secretariat on the status and description of the ENC schemes in the Region at the WENDWG7 meeting (paragraph 5)

**Consider** appropriate arrangements to prepare for the IHO Assembly to be held in April 2017 (paragraphs 27 to 30)

Take any other actions as considered appropriate.

# Date that requirements for ECDIS back-up arrangements using paper charts were provided to IHO Secretariat

Country	Date that requirements for ECDIS back-up arrangements using paper charts were provided to IHO Secretariat		
Antigua and Barbuda	No information provided to IHO Secretariat		
Bahamas	No information provided to IHO Secretariat		
Barbados	No information provided to IHO Secretariat		
Belize	No information provided to IHO Secretariat		
Brazil	September 2015		
Colombia	April 2007		
Costa Rica	No information provided to IHO Secretariat		
Cuba	No information provided to IHO Secretariat		
Dominica	No information provided to IHO Secretariat		
Dominican Republic	No information provided to IHO Secretariat		
El Salvador	No information provided to IHO Secretariat		
France	March 2016		
Grenada	No information provided to IHO Secretariat		
Guatemala	No information provided to IHO Secretariat		
Guyana	No information provided to IHO Secretariat		
Haiti	No information provided to IHO Secretariat		
Honduras	No information provided to IHO Secretariat		
Jamaica	No information provided to IHO Secretariat		
Mexico	No information provided to IHO Secretariat		
Netherlands	September 2015		
Nicaragua	No information provided to IHO Secretariat		
Panama	No information provided to IHO Secretariat		
St Kitts and Nevis	No information provided to IHO Secretariat		
St Lucia	No information provided to IHO Secretariat		
St Vincent and the Grenadines	No information provided to IHO Secretariat		
Suriname	No information provided to IHO Secretariat		
Trinidad and Tobago	No information provided to IHO Secretariat		
UK	April 2007		
USA	April 2007		
Venezuela (Bolivarian Republic of)	No information provided to IHO Secretariat		

## Table Showing the Status of the Provision of Hydrographic Services in the MACHC Region

(based on information available to the IHO Secretariat)

Country	IHO Member State	Effective MSI capability (based on IHO WWNWS Sub Committee assessment)	State of Surveys 0-200m depth (Adequate) (Requires re-survey) (Unsurveyed)	Principal Charting Authority	Is there a Formally Nominated Hydrographic Authority?	IMO Member State
Antigua and Barbuda	<b>✓</b>	IHO MSI training provided No obvious capability in place as yet.		UK	<b>✓</b>	<b>✓</b>
Bahamas	<b>✓</b>	No IHO MSI training provided  No obvious capability in place.		UK	<b>✓</b>	<b>✓</b>
Barbados	<b>✓</b>	IHO MSI training provided No obvious capability in place as yet.		UK	No	<b>✓</b>
Belize	<b>✓</b>	No IHO MSI training provided  No obvious capability in place.		UK	✓	✓
Brazil – region B	<b>✓</b>	NAVAREA V		BR	✓	✓
Colombia – region B	<b>✓</b>	✓		со	<b>✓</b>	<b>✓</b>
Costa Rica		IHO MSI training provided No obvious capability in place as yet.		UK	<b>✓</b>	<b>✓</b>

Country	IHO Member State	Effective MSI capability (based on IHO WWNWS Sub Committee assessment)	State of Surveys 0-200m depth (Adequate) (Requires re-survey) (Unsurveyed)	Principal Charting Authority	Is there a Formally Nominated Hydrographic Authority?	IMO Member State
Cuba	<b>✓</b>	No IHO MSI training provided No obvious capability in place.		CU	<b>✓</b>	<b>✓</b>
Dominica		IHO MSI training provided No obvious capability in place as yet.		UK	No	✓
Dominican Republic	✓	No IHO MSI training provided  No obvious capability in place.	No information available	UK	✓	<b>✓</b>
El Salvador		IHO MSI training provided No obvious capability in place as yet.		US	No	<b>✓</b>
France – Clipperton I.	<b>✓</b>	Capability provided by France		FR	✓	<b>✓</b>
France – French Antilles	<b>✓</b>	Capability provided by France		FR	<b>√</b>	<b>✓</b>
France – French Guiana	<b>✓</b>	Capability provided by France		FR	<b>✓</b>	<b>✓</b>
Grenada		IHO MSI training provided No obvious capability in place as yet.		UK	<b>✓</b>	<b>✓</b>

Country	IHO Member State	Effective MSI capability (based on IHO WWNWS Sub Committee assessment)	State of Surveys 0-200m depth (Adequate) (Requires re-survey) (Unsurveyed)	Principal Charting Authority	Is there a Formally Nominated Hydrographic Authority?	IMO Member State
Guatemala	✓	✓		US	✓	<b>√</b>
Guyana		IHO MSI training provided No obvious capability in place as yet.		UK	No	<b>√</b>
Haiti	Membership approved – awaiting action from Haiti	No IHO MSI training provided No obvious capability in place as yet.		US	<b>✓</b>	<b>√</b>
Honduras		<b>✓</b>		US	✓	<b>✓</b>
Jamaica	<b>✓</b>	<b>✓</b>		UK	<b>✓</b>	<b>✓</b>
Mexico	<b>✓</b>	<b>✓</b>		MX	<b>✓</b>	<b>✓</b>
Netherlands – Leeward Is.	<b>✓</b>	✓		NL	<b>✓</b>	<b>✓</b>
Netherlands – Windward Is.	<b>✓</b>	✓	1	NL	✓	✓

Country	IHO Member State	Effective MSI capability (based on IHO WWNWS Sub Committee assessment)	State of Surveys 0-200m depth (Adequate) (Requires re-survey) (Unsurveyed)	Principal Charting Authority	Is there a Formally Nominated Hydrographic Authority?	IMO Member State
Nicaragua		No IHO MSI training provided  No obvious capability in place as yet.		US	✓	✓
Panama		✓		UK/PA	✓	✓
St Kitts and Nevis		IHO MSI training provided No obvious capability in place as yet.		UK	Unknown	<b>√</b>
St Lucia		No IHO MSI training provided  No obvious capability in place as yet.		UK	Unknown	✓
St Vincent and the Grenadines		✓		UK	Unknown	✓
Suriname	<b>✓</b>	✓	Information provided to the IHO Secretariat is contradictory	UK (in process to SR)	✓	<b>√</b>
Trinidad and Tobago	<b>✓</b>	✓		UK	Unknown	<b>√</b>
UK – Anguilla	<b>✓</b>	IHO MSI training provided No obvious capability in place as yet.		UK	Unknown	✓

Country	IHO Member State	Effective MSI capability (based on IHO WWNWS Sub Committee assessment)	State of Surveys 0-200m depth (Adequate) (Requires re-survey) (Unsurveyed)	Principal Charting Authority	Is there a Formally Nominated Hydrographic Authority?	IMO Member State
UK – British Virgin Is.	<b>✓</b>	IHO MSI training provided No obvious capability in place as yet.		UK	Unknown	<b>✓</b>
UK – Cayman Is.	<b>✓</b>	IHO MSI training provided No obvious capability in place as yet.	1	UK	Unknown	<b>√</b>
UK – Montserrat	<b>✓</b>	IHO MSI training provided No obvious capability in place as yet.		UK	Unknown	<b>✓</b>
UK – Turks and Caicos Is.	<b>✓</b>	IHO MSI training provided No obvious capability in place as yet.		UK	Unknown	<b>✓</b>
USA – region B	✓	NAVAREA IV	No information supplied by USA for region B	US	✓	✓
USA – Puerto Rico and US Virgin Is, and Navassa Is.	<b>✓</b>	No IHO MSI training provided  No obvious capability in place as yet.	Information provided to the IHO Secretariat is contradictory	US	<b>✓</b>	<b>✓</b>
Venezuela (Bolivarian Republic of)	~	No IHO MSI training provided  No obvious capability in place as yet.		VE	<b>✓</b>	<b>✓</b>

## MSI Training - Outcome Results

Country (NAVAREA)	Received MSI training?	Reports issued 1 August 2015 - 31 July 2016	assessed effective MSI capability
Antigua and Barbuda	Yes	None	No information/ no contact
Bahamas	No	None	No information/ no contact
Barbados	Yes	None	No information/ no contact
Belize	No	None	No information/ no contact
Brazil – region B	Yes	Issued as part of the NAVAREA V report	Yes
Colombia – region B	Yes	47	Yes
Costa Rica	Yes	None	No information/no contact
Cuba	No	None	No information/ no contact
Dominica	Yes	None	No information/ no contact
Dominican Republic	No	None	No information/ no contact
El Salvador	Yes	None	No information/ no contact
France – Clipperton I.	NK	None	No information/ no contact
France – French Antilles	NK	None	No information/ no contact
France – French Guiana	NK	43	Yes
Grenada	Yes	None	No information/ no contact
Guatemala	Yes	5	Yes
Guyana	Yes	None	No information/ no contact
Haiti	No	None	No information/ no contact
Honduras	Yes	3	Yes
Jamaica	Yes	6	Yes
Mexico	Yes	394	Yes
Netherlands – Leeward Is.	NK	10	Yes

Country (NAVAREA)	Received MSI training?	Reports issued 1 August 2015 - 31 July 2016	assessed effective MSI capability
Netherlands – Windward Is.	NK	None	Yes
Nicaragua	No	None	No information/ no contact
Panama	No	1	Yes
St Kitts and Nevis	Yes	None	No information/ no contact
St Lucia	No	None	No information/ no contact
St Vincent and the Grenadines	Yes	1	Yes
Suriname	Yes	None	No information/ no contact
Trinidad and Tobago	Yes	46	Yes
UK – Anguilla	Yes	None	No information/ no contact
UK – British Virgin Is.	Yes	None	No information/ no contact
UK – Cayman Is.	Yes	None	No information/ no contact
UK – Montserrat	Yes	None	No information/ no contact
UK – Turks and Caicos Is.	Yes	None	No information/ no contact
USA – region B	Yes	1103	NAVAREA IV
USA – Puerto Rico and US Virgin Is, and Navassa Is.	No	Inside USA region B	NAVAREA IV
Venezuela (Bolivarian Republic of)	No	None	No information/ no contact

## **Date of latest entries to IHO Country Data Bases**

Country	IHO C-55 - last update received	IHO P-5 -Yearbook - last update received
Antigua and Barbuda	2007	Nov 2012
Bahamas	2007	Oct 2016
Barbados	2015	June 2015
Belize	2007	No update date
Brazil – region B	2016	Oct 2016
Colombia – region B	2015	March 2016
Costa Rica	No update date	No update date
Cuba	2005	March 2014
Dominica	2007	No update date
Dominican Republic	No data	Oct 2016
El Salvador	2005	Oct 2014
France – Clipperton I.	2015	October 2016
France – French Antilles	2015	October 2016
France – French Guiana	2015	October 2016
Grenada	2007	Nov 2012
Guatemala	2015	Aug 2014
Guyana	2007	Aug 2015
Haiti	No data	May 2014
Honduras	2005	Feb 2014
Jamaica	2007	Oct 2013
Mexico	2012	June 2016
Netherlands – Leeward Is.	2015	January 2015
Netherlands – Windward Is.	2015	January 2015
Nicaragua	No data	Oct 2015
Panama	No data	May 2015
St Kitts and Nevis	2007	No update date
St Lucia	2004	No update date
St Vincent and the Grenadines	2013	Oct 2014
Suriname	No update date	Nov 2012
Trinidad and Tobago	2013	June 2015
UK – Anguilla	2010	No update date
UK – British Virgin Is.	2010	No update date
UK – Cayman Is.	2010	No update date

Country	IHO C-55 - last update received	IHO P-5 -Yearbook - last update received
UK – Montserrat	2010	No update date
UK – Turks and Caicos Is.	No update date	No update date
USA – region B	No data	August 2016
USA – Puerto Rico and US Virgin Is, and Navassa Is.	2007	August 2016
Venezuela (Bolivarian Republic of)	2009	Dec 2015